## ABSTRACT OF THE DISCLOSURE

This invention provides a process for producing a three-dimensional polyimide optical waveguide, which comprises: (I) irradiating a polyamic acid film with a laser beam while converging the laser beam at an inside portion of the film and relatively moving the light convergence point, the polyamic acid film containing: (a) a polyamic acid obtained from a tetracarboxylic dianhydride and a diamine; and (b) per 100 parts of the polyamic acid, from 0.5 part by weight to less than 10 parts by weight of a specific 1,4-dihydropyridine derivative represented by formula (I):

$$R_5OOC$$
 $R_3$ 
 $R_4$ 
 $R_2$ 
 $R_4$ 
 $R_1$ 
 $R_2$ 
 $R_3$ 
 $R_4$ 
 $R_4$ 
 $R_5OOC$ 

and then, (II) heating the polyamic acid film to imidize the polyamic acid, thereby obtaining an optical waveguide having a continuous core region where the refraction index has been changed, in the thus formed polyimide film.